



Security incidents affecting personal data: an 'exploratory travel' from technology to law

(*under Chatham House Rule)

DPO meeting – 8 May 2015

Mario Guglielmetti
Legal officer
Unit Supervision and Enforcement

“When law and technology come together, magical things happen”

“Security risks management: **starting points!**”

1. The technological (digital) environment: high degree of interconnectivity and interdependency!

Public-private networks;

Networks-devices (smartphones, *etc.*);

Controllers-processors* (cloud, *etc.*)

2. Variety of possible threats, vulnerability, events (*the great plurality of ‘incident source(s)-incidents points of entry!*):

Intentional/accidental;

Internal/external;

Human/technical;

Basic/sophisticated ..

3. Variety of possible damages!:

Impact on: (i) confidentiality; (ii) integrity; (iii) availability.

Effect of: loss of reputation, trust, privacy, disruption of operation, loss of financial assets, lawsuits ..

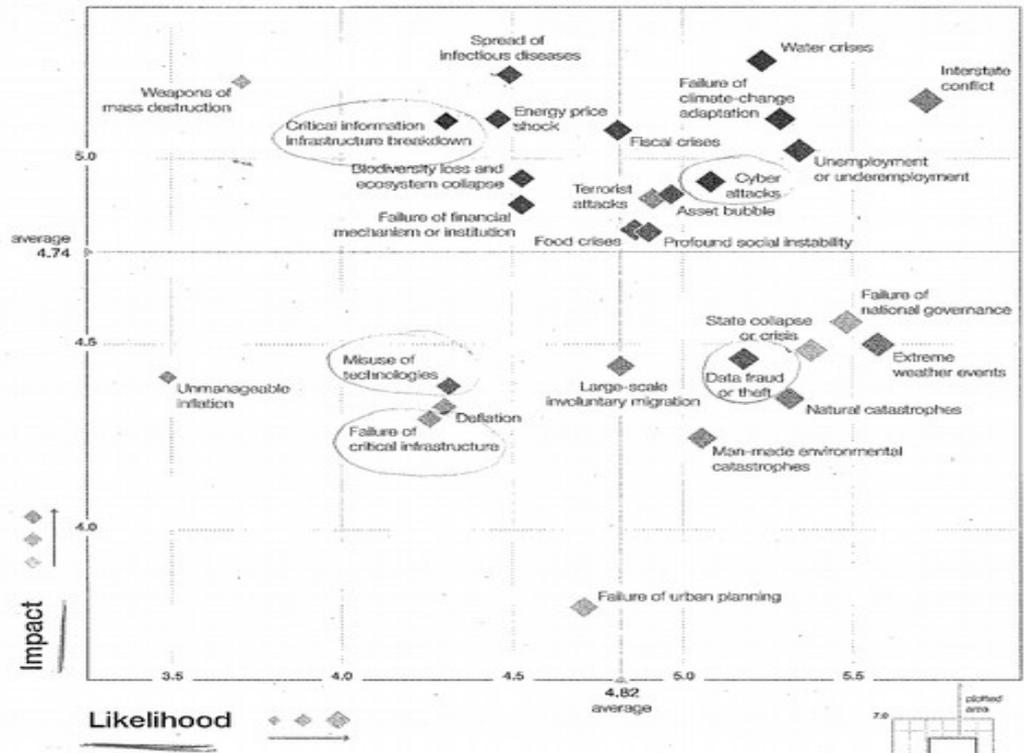
now, Your experience?





Figure 1: The Global Risks Landscape 2015

— WORLD ECONOMIC FORUM —



- Top 10 risks in terms of Likelihood**
- ◆ Interstate conflict
 - ◆ Extreme weather events
 - ◆ Failure of national governance
 - ◆ State collapse or crisis
 - ◆ Unemployment or underemployment
 - ◆ Natural catastrophes
 - ◆ Failure of climate-change adaptation
 - ◆ Water crises
 - ◆ Data fraud or theft
 - ◆ Cyber attacks

- Top 10 risks in terms of Impact**
- ◆ Water crises
 - ◆ Spread of infectious diseases
 - ◆ Weapons of mass destruction
 - ◆ Interstate conflict
 - ◆ Failure of climate-change adaptation
 - ◆ Energy price shock
 - ◆ Critical information infrastructure breakdown
 - ◆ Fiscal crises
 - ◆ Unemployment or underemployment
 - ◆ Biodiversity loss and ecosystem collapse

- Categories**
- ◆ Economic
 - ◆ Environmental
 - ◆ Geopolitical
 - ◆ Societal
 - ◆ Technological

Source: Global Risks Perception Survey 2014.
 Note: Survey respondents were asked to assess the likelihood and impact of the individual risks on a scale of 1 to 7, 1 representing a risk that is not likely to happen or have impact, and 7 a risk very likely to occur and with massive and devastating impacts. See Appendix B for more details. To ensure legibility, the names of the global risks are abbreviated. Also see Appendix A for the full name and description.

* * * « **Security** breach, **personal data** breach, or **..both?** »

What about the following?

- Generic **phishing attack** is received by users (but the attack is promptly detected and no passwords, user names, .. are given)
- An **equipment failure** has caused the temporary interruption of a main Information System
- A user reports the **theft of Agency's portable computer** containing sensitive information
- A staff member **accessed personal data** he/she is not authorised to access



« The Challenge »

We need:

- A **systemic** and **holistic** approach and **proximity** (control works better when close to the possible incidents point of entry);
- Support by the **highest level** of leadership;
- A **formal framework** (« write down what you do, do what you write down »)
- *subject to **audit and review cycles***
- *still, flexible enough to allow **forward looking responses to emerging risks.***

« The **RACI** Matrix »

- **Responsible:** the concept of « ownership » of the incident;
Responsibility may or may not be legal; R. even for risk reduced to an acceptable level (residual risk).
- **Accountable (Internally):** to whom R is accountable;
- **Consulted:** he/she has information and/or capability which are necessary for the handling of the incident;
- **Informed:** must be notified of results (of the incident handling), but doesn't need to be consulted.

Who is responsible?/ Who is accountable? To whom?/ Who must be consulted?
For what?/ Who must be informed?

« The Incident Management. **Steps:** »

1. Incident detection and reporting;

2. Incident handling:

Assessment (different gravity assessment models in use, e.g.: $SE = DPC \times EI + CB^*$)

Containment

3. Incident record

How RACI fits into this? *And in case of processor's DB?*

ENISA: Severity = data protection context x ease of identification + circumstances of the breach

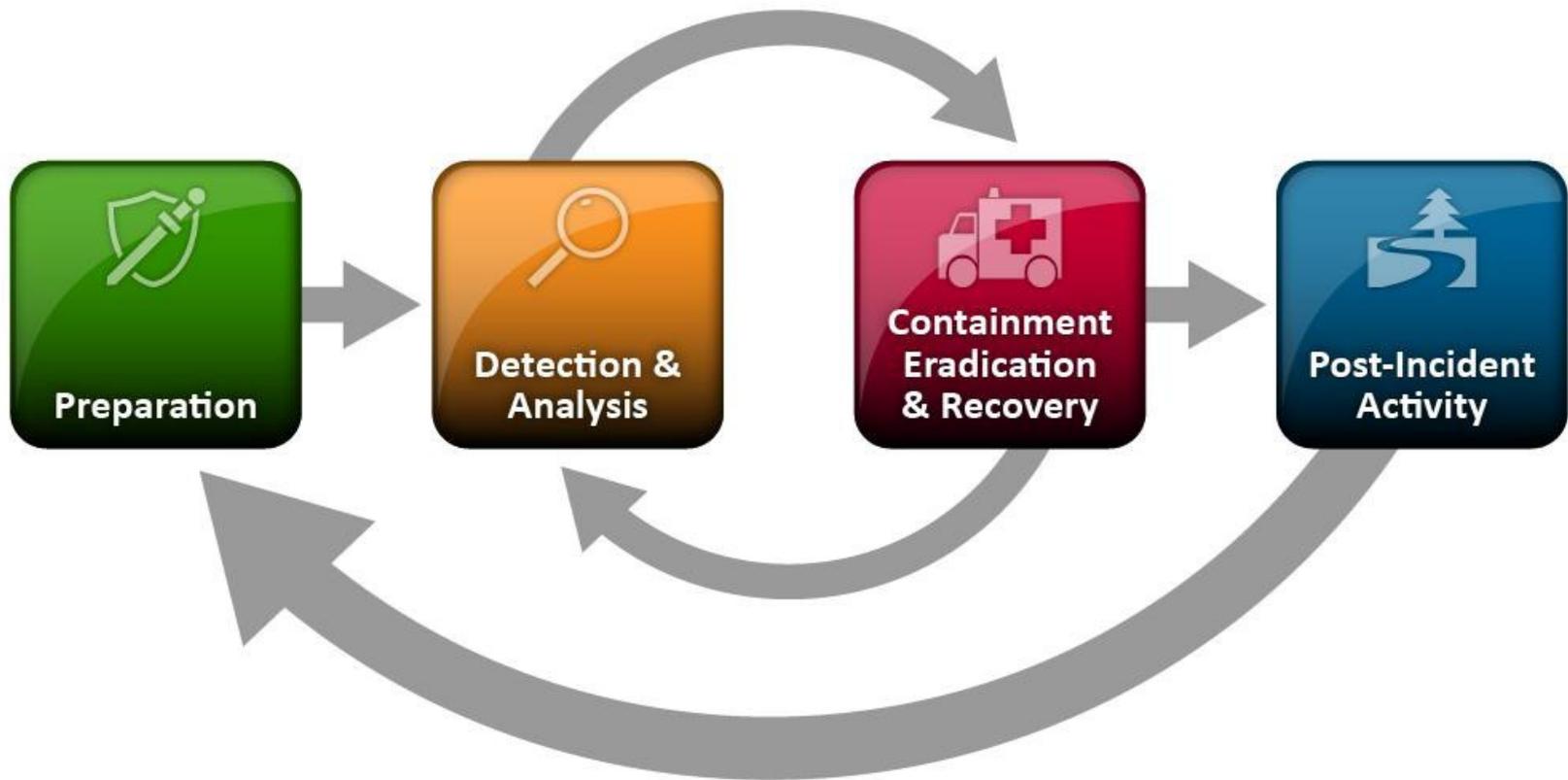
« Communication: »

- *(internally and/or externally)* Info to DS (after conclusion of the investigation) « *except in cases in which such provision of info could cause serious harm to the organization* » (examples?) (info to DS as containment?);
- *(internally)* Info to LISO: all IT security incidents;
- *(internally)* Info to DPO: all security incidents related to PD. Role of the DPO? (internal supervisor, contact point ..)

Reporting mechanism for IT security incidents affecting personal data:

- « *Information systems security events must be reported through designated channels as quickly as possible.*
- In case of a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of or access to PD processed by Commission information systems, **the system owner needs to inform the DPO** » (COM Guidance on data breach)*

« NIST incident response life-cycle »



“finally .. **Back to the future (law)!**”

*One (general) remark: the GDPR may seem to ‘look at PDB’ from the perspective of a formal requirement (the ‘top of the iceberg’). For (some) **holistic** view see interfaces of PDB with DPIA; Security measures; Privacy by design/by default – Art. 30; 33; 23.*



Why notifying?

- As a security safeguard
- As openness about privacy practices
- To restore control over personal information
- To ensure public trust

“Question time (please vote) ! ”

*Art. 31 (GDPR) – The controller (the **externally accountable** person) shall notify the PDB to the supervisory authority.*

*1. On what: “**All**” DB **OR** “DB likely to result in **(high)** risks for the individual such as...”*

(note, second option implies a DB severity assessment focussed on the DS harm; should a different threshold be set out for DBN to supervisors?)

*2. On when: **24** hours ‘after having become aware’ (*upon notification from incident owner) or provide justification **OR 72** hours **OR two-steps**, that is first preliminary and second phase notification?*

*

3. On the content:

- Is it always 'possible' and 'appropriate' to describe **categories and number of DS** and **categories and number of data records** concerned?

- Other elements of content are more 'stable': **nature of PDB**; **contact details** of DPO (or others *which?); **measures recommended** to mitigate adverse effects; **consequences** (*OR 'likely' consequences?); **measures taken** or proposed to be taken by controller address the PDB.

4. On the Incident record:

- Documentation to enable to verify compliance with DPN article OR ... *and with* article on security of processing? (Art. 30)

Art. 32 (GDPR) – The controller (the **externally accountable** person) shall notify the PDB to the DS.

Questions (please vote):

- On what: DB likely to **adversely affect** the protection of PD or the legitimate interests of the DS **OR** “DB likely to result in (**high**) **risks** for the individual such us...”? (note: Art. 31 always implies a DB severity assessment focussed on the DS harm);
- On when: without undue delay (stable, no vote)

3. On *the content* of the DBN:

- Nature of the DB, *plus*:
- DPO contact details (stable, no vote);
- Consequences **OR** 'likely' consequences 'as identified by controller' (the legally R.);
- Measures taken or proposed by the controller to address the DB;
- Measures the DS should take to mitigate the adverse effects.

4. On when **NOT** to notify the DB:

- The controller has implemented appropriate technological and organizational measures (e.g. encryption); *or (additional cases):*
- The controller has taken subsequent measures that ensure that the 'risk threshold' for the DS is no longer reached;
- Disproportionate effort (and public communication instead?);
- The DBN would adversely affect a substantial public interest (would it cover the « serious harm to the organization » referred before? Is 'postponing' an option?)

Thank you for your participation!

For more information:

www.edps.europa.eu

edps@edps.europa.eu



[@EU_EDPS](https://twitter.com/EU_EDPS)